

REMARKS

With entry of this amendment, claims 17-52 are pending in this application, claims 17-28 of which stand rejected, and claims 29-52 of which have been newly added. Based on the foregoing amendments and following remarks, reconsideration and allowance of this application is respectfully requested.

Information Disclosure Statement

While reviewing the form PTO-1449, dated June 20, 2005, which was returned by the Examiner, Applicant discovered that the references cited under the “OTHER ART” section have not been initialized. Applicant respectfully requests that the Examiner initialize these references and return a copy of the PTO-1449 to the undersigned.

Claim Objections

Claims 19 and 25 stand objected to under 37 C.F.R. §1.75(c) as being of improper dependent form for failing to further limit the subject of a previous claims. In particular, the Examiner states that claim 17 specifies the step of summing together to produce a directional signal, and claim 19 fails to further limit the invention by specifying another step of summing together to produce multiple directional signals. The Examiner states that claim 25 has a similar problem. Although Applicant believes that unamended claims 19 and 25 further limit the independent claims from which they depend, these claims have been amended to clarify that they further limit the summing feature.

Drawing Objections

The drawings stand objected to under 37 C.F.R. §1.83(a) for failing to show every feature of the invention specified in the claims, and in particular, the energy propagation barrier specified in claims 17 and 23. Accordingly, Fig. 25, which shows the energy propagation barrier as the user

head on which left and right sensors are disposed, has been added to the application. In addition, references to Fig. 25 were added to the brief description and detailed description. No new matter has been added by these amendments.

Claim Rejections-35 U.S.C. §102

Claims 17, 19, 21, 23, 24, and 27 stand rejected under 35 U.S.C. §102(b), as being anticipated by the publication “Microphone-Array Hearing Aids with Binaural Output – Part II: A Two-Microphone Adaptive System,” by Daniel P. Welker (“Welker”). Applicant respectfully traverses this rejection, since Welker does not disclose each and every element required by these claims, as amended.

In particular, independent claims 17 and 23 have been amended to require the signal amplitude adjustment to be based on a determined difference between amplitudes of signals produced by the first and second sensors. In contrast, to the extent that Welker discloses adjusting the amplitudes of the signals produced by the first and second sensors, such adjustment is not based on a determined difference between the amplitudes of the signals.

Thus, Applicant submits that independent claims 17 and 23, as well as the claims depending therefrom (claims 19, 21, 24, and 27), are not anticipated by Welker, and as such, respectfully request withdrawal of the §102 rejections of these claims.

Claim Rejections-35 U.S.C. §103

Claims 17, 18, 21-24, 27, and 28 stand rejected under 35 U.S.C. §103 as being obvious over U.S. Patent No. 6,697,494, issued to Klootsema et al. (“Klootsema”), alone, or in combination with U.S. Patent No. 6,240,192 issued to Brennan et al. (“Brennan”). Applicant respectfully traverses these rejections, since neither of these references, alone or in combination, disclose, teach, or suggest the combination of elements required by these claims, and in particular, the adjustment of amplitudes

of signals produced by the first and second sensors based on a determined difference between the amplitudes of the signals, as required by independent claims 17 and 23.

Thus, Applicant submits that claims 17 and 23, as well as the claims depending therefrom (claims 18, 21, 22, 24, 27, and 28), are not obvious over any combination of Klootsema and Brennan, and as such, respectfully request withdrawal of the §103 rejections of these claims.

Newly Added Claims

Applicant represents that newly added claims 29-52 are supported by the specification, as originally filed, and are patentable over the cited prior art. In particular, claims 29-35 are patentable for at least the same reasons as independent claims 17 and 23 from which they depend are, and claims 36-52 are patentable at least because the cited prior art does not disclose determining a phase correction value based on the signal amplitude difference, and applying the phase correction value to the signals to produce phase corrected signals.

Conclusion

Based on the foregoing, it is believed that, with entry of this amendment, all claims are now allowable and a Notice of Allowance is respectfully requested. If the Examiner has any questions or comments regarding this amendment, the Examiner is respectfully requested to contact the undersigned at (714) 830-0600.

Respectfully submitted,



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DRAWING AMENDMENTS

Please add the following Fig. 25 illustrated in the drawing sheet attached hereto.